UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/792,180	03/03/2004	James T. Russell	02-68	4931

30031 7590 06/22/2006

MICHAEL W. HAAS, INTELLECTUAL PROPERTY COUNSEL
RESPIRONICS, INC.
1010 MURRY RIDGE LANE
MURRYSVILLE, PA 15668

EXAMINER	
TANINGCO, MARCUS H	

ART UNIT	PAPER NUMBER
2884	

DATE MAILED: 06/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/792,180	RUSSELL, JAMES T.	
	Examiner	Art Unit	
	Marcus H. Taningco	2884	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 June 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3,6,10 and 12-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3,6,10 and 12-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *05 August 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/5/06 has been entered.

Response to Amendment

Amendments filed 5/5/06 has been entered. Claims 1-3, 6, 10, and 12-16 are subject to examination herein.

Response to Arguments

Applicant's arguments with respect to claims 1-3, 6, 10, and 12-16 have been considered but are moot in view of the new ground(s) of rejection. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the inlet and outlet path are not at a 90 degree angle with respect to the main gas flow path) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Claim Objections

Claim 12 is objected to because of the following informalities: The phrase ""wherein the gas inlet, the gas outlet, and the gas flow passage are disposed in a Z configuration," is repeated. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1 and 10 rejected under 35 U.S.C. 103(a) as being unpatentable over Brunamoti et al. (US 2001/0048079) in view of Sukigara et al (US 4,622,464).

Re claims 1 and 10, Brunamoti discloses a gas analyzer comprising: an infrared source **30**, an infrared detector **40**, a sample cell **17** adapted to be disposed between the source **30** and detector **40**, wherein the sample cell **17** includes a gas inlet **15** at a first end portion of the sample cell **17**, a gas outlet **16** at a second end portion of the sample cell **17**, and a gas flow passage defined in the sample cell **17** between the gas inlet **15** and the gas outlet **16**, wherein the gas flow passage is generally parallel to the optical path **80** between the source **30** and the detector **40** such that the gas flow passage defines a sample chamber **12**, wherein a length of the gas flow passage defining the sample chamber **12** is greater than a width of the gas flow passage, and wherein at least a portion of a wall defining the gas flow passage includes an infrared reflective

surface [0053] (Figs. 1-3). Although Brunamoti fails to teach the gas inlet, the gas outlet, and the gas flow passage are disposed in a Z configuration, Sukigara teaches an infrared gas analyzer comprising a gas inlet **15**, a gas outlet **16**, and a gas flow passage disposed in a Z configuration (Fig. 4a). It would have been obvious to one with ordinary skill in the art at the time the invention was made to modify Brunamoti with the Z configuration taught by Sukigara in order to provide uniform gas flow.

Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brunamoti et al. and Sukigara, as applied to claim 1 above, and further in view of Eckles (US 6,369,387).

Re claims 2 and 3, Brunamoti teaches a portion of a wall defining the gas flow passage includes an infrared reflective surface [0053], but fails to specify the type of material. Eckles teaches the use of gold, a high index material, to reflect infrared beams (Col. 4, 26-29). Thus, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the material **18** taught by Brunamoti to include gold in order to increase reflectance.

Claims 6 and 12-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brunamoti et al. and Sukigara, and further in view of O'Leary (US 2002/0153490).

Re claims 6 and 12-16, Brunamoti discloses a gas analyzer comprising: an infrared source **30**, an infrared detector **40**, a sample cell **17** adapted to be disposed between the source **30** and detector **40**, wherein the sample cell **17** includes a gas inlet **15** at a first end portion of the sample cell **17**, a gas outlet **16** at a second end portion of the sample cell **17**, and a gas flow passage defined in the sample cell **17** between the gas inlet **15** and the gas outlet **16**, wherein the gas flow passage is generally parallel to the optical path **80** between the source **30** and the

detector **40** such that the gas flow passage defines a sample chamber **12**, wherein a length of the gas flow passage defining the sample chamber **12** is greater than a width of the gas flow passage, and wherein at least a portion of a wall defining the gas flow passage includes an infrared reflective surface [0053] (Figs. 1-3). Brunamoti fails to disclose a high numerical aperture lens. O'Leary teaches a concentration detection system comprising a high numerical aperture lens **86** disposed to collimate radiation received from the source [0040]. It would have been obvious to one with ordinary skill in the art at the time the invention was made to modify Brunamoti to include the lens taught by O'Leary in order to integrate the collimated radiation passing through the sample cell evenly over the detector. Furhtermore, although Brunamoti fails to teach the gas inlet, the gas outlet, and the gas flow passage are disposed in a Z configuration, Sukigara teaches an infrared gas analyzer comprising a gas inlet **15**, a gas outlet **16**, and a gas flow passage disposed in a Z configuration (Fig. 4a). It would have been obvious to one with ordinary skill in the art at the time the invention was made to modify Brunamoti with the Z configuration taught by Sukigara in order to provide uniform gas flow.

Re claims 13-16, Brunamoti discloses a system according to claim 1, but fails to disclose a high numerical aperture lens. O'Leary teaches a concentration detection system comprising a high numerical aperture (half-ball) lens **86** disposed to collimate radiation received from the source [0040]. It would have been obvious to one with ordinary skill in the art at the time the invention was made to modify Brunamoti to include the lens taught by O'Leary in order to integrate the collimated radiation passing through the sample cell evenly over the detector.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marcus H. Taningco whose telephone number is (571) 272-1848. The examiner can normally be reached on M - F 9:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Porta can be reached on (571) 272-2444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MT

ALBERT J. GAGLIARDI
PRIMARY EXAMINER